

**COMBINED DECLARATION AND POWER OF ATTORNEY**

**As a below named inventor, I hereby declare that:**

This declaration is of the following type:

- ☒ original  
☐ divisional  
☐ continuation  
☐ continuation-in-part

**INVENTORSHIP IDENTIFICATION**

Yoo, Jong Hyun; Lu, Xinliang; Chen, Chiliang; Lai, Kevin Kaung; Kao, Chien-Tao

My residence, post office address and citizenship are as stated below next to my name. I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

**TITLE OF INVENTION**

PULSE NUCLEATION ENHANCED NUCLEATION TECHNIQUE FOR IMPROVED STEP COVERAGE AND  
BETTER GAP FILL FOR WCVD PROCESS

**SPECIFICATION IDENTIFICATION**

The specification of which:

- ☒ is attached hereto  
☐ was filed on \_\_\_\_\_, under Serial No. \_\_\_\_\_, executed on even date herewith; or  
\_\_\_\_\_ Express Mail No. (as Serial No. not yet known) and was amended on  
\_\_\_\_\_ (if applicable)  
☐ was described and claimed in PCT International Application No. \_\_\_\_\_ filed on  
\_\_\_\_\_ and as amended under PCT Article 19 on \_\_\_\_\_.

**ACKNOWLEDGMENT OF REVIEW OF PAPERS AND DUTY OF CANDOR**

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose all information I know to be material to patentability in accordance with Title 37, Code of Federal Regulations, 1.56,

and which is material to the examination of this application; namely, information where there is a substantial likelihood that a reasonable Examiner would consider it important in deciding whether to allow the application to issue as a patent, and

- ☒ In compliance with this duty there is attached an Information Disclosure Statement in accordance with 37 CFR 1.98.

**PRIORITY CLAIM (35 U.S.C. §119)**

I hereby claim foreign priority benefits under Title 35, United States Code, §119, of any foreign application(s) for patent or inventor's certificate or of any PCT international application(s) designating at least one country other than the United States of America or of any United States Provisional Application(s) listed below, and have also identified below any foreign application(s) for patent or inventor's certificate or any PCT international application(s) designating at least one country other than the United States of America filed by me on the same subject matter having a filing date before that of the application(s) of which priority is claimed.

- ☒ No such applications have been filed.  
☐ Such applications have been filed as follows:

**A. Prior foreign/PCT/provisional application(s) filed within 12 mos. (6 mos. for design) prior to this application, and any priority claims under 35 U.S.C. § 119**

<u>Country/PCT</u>	<u>Application No</u>	<u>Date Filed</u>	<u>Priority Claimed</u>	
			<input type="checkbox"/> Yes	<input type="checkbox"/> No
			<input type="checkbox"/> Yes	<input type="checkbox"/> No

**B. All foreign application(s), if any, filed more than 12 mos. (6 mos for design) prior to this U.S. application**

Country:  
Application No:  
Filing date:

**PRIORITY CLAIM (35 U.S.C. §120)**

I hereby claim the benefit under Title 35, United States Code, § 120, of any United States application(s) or PCT international application(s) designating the United States of America that is/are listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in that/those prior application(s) in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose information that is material to the examination of this application (namely, information where there is substantial likelihood that a reasonable Examiner would consider it important in deciding whether to allow the application to issue as a patent) which occurred between the filing date of the prior application(s) and the national or PCT international filing date of this application.

- ☒ No such applications have been filed  
☐ Such applications have been filed, as follows:

<u>Serial No.</u>	<u>Filing Date</u>	<u>Status</u>	
		<u>Patented Pending</u>	<u>Abandoned</u>

## POWER OF ATTORNEY

I hereby appoint the following attorneys and/or agents to prosecute this application and transact all business in the Patent and Trademark Office connected therewith:

Peter J. Sgarbossa	Registration No. 25,610
Donald Verplancken	Registration No. 33,217
Lawrence Edelman	Registration No. 25,226
Michael B. Einschlag	Registration No. 29,301
Joseph Bach	Registration No. 37,771
Raymond Kam-On Kwong	Registration No. 37,165
James C. Wilson	Registration No. 35,412
Robert W. Mulcahy	Registration No. 25,436
Kenneth C. Brooks	Registration No. 38,393

### Send correspondence to:

Patent Counsel, MS/2061  
Legal Affairs Dept.  
Applied Materials, Inc.  
P.O. Box 450A  
Santa Clara, CA 95052

### Direct telephone calls to:

Kenneth C. Brooks  
Law Office of Kenneth C. Brooks  
(512) 527-0104

## DECLARATION

*I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and, further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Sec. 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patents issued thereon.*

Full name of first inventor: Jong Hyun Yoo

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_

Residence: Milpitas, California

Post Office Address: 190 Rainbow Place  
Milpitas, California 95035  
U.S.A.

Country of Citizenship: South Korea

Full name of second inventor: Xinliang Lu

Inventor's signature:  \_\_\_\_\_ Date: 12/12/2001

Residence: Sunnyvale, California

Post Office Address: 685 Garland Avenue #54  
Sunnyvale, California 94086  
U.S.A.

Country of Citizenship: People's Republic of China

Full name of **third** inventor: Chiliang Chen

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_

Residence: Sunnyvale, California

Post Office Address: 1712 Calary Drive  
Sunnyvale, California 94538  
U.S.A.

Country of Citizenship: Republic of China (Taiwan)

Full name of **fourth** inventor: <sup>n</sup> Kewin Kaung Lai

Inventor's signature:  \_\_\_\_\_ Date: 12/12/01

Residence: Milpitas, California

Post Office Address: 1354 Terra Alta Drive  
Milpitas, California 95035  
U.S.A.

Country of Citizenship: Republic of China (Taiwan)

Full name of **fifth** inventor: Chien-Tao Kao

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_

Residence: Sunnyvale, California

Post Office Address: 725 Starbush Drive  
Sunnyvale, California 94086  
U.S.A.

Country of Citizenship: Republic of China (Taiwan)

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Application No:  
Filing date:

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Full name of **first** inventor: Jong Hyun Yoo

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_

Residence: Milpitas, California  
Post Office Address: 190 Rainbow Place  
Milpitas, California 95035  
U.S.A.

Country of Citizenship: South Korea

Full name of **second** inventor: Xinliang Lu

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_

Residence: Sunnyvale, California  
Post Office Address: 685 Garland Avenue #54

Sunnyvale, California 94086  
U.S.A.

Country of Citizenship: People's Republic of China

Full name of **third** inventor: Chiliang Chen

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_

Residence: Sunnyvale, California

Post Office Address: 1712 Calary Drive  
Sunnyvale, California 94538  
U.S.A.

Country of Citizenship: Republic of China (Taiwan)

Full name of **fourth** inventor: Kevin Kaung Lai


Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_

Residence: Milpitas, California

Post Office Address: 1354 Terra Alta Drive  
Milpitas, California 95035  
U.S.A.

Country of Citizenship: Republic of China (Taiwan)

Full name of **fifth** inventor: Chien-Teh Kao

Inventor's signature:  Date: 12/14/2001

Residence: Sunnyvale, California

Post Office Address: 725 Starbush Drive  
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U.S.A.

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